

Seabrook 1

Initiating Events

Mitigating Systems

G**Significance:** Oct 04, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Perform an Adequate Calculation of Emergency Core Cooling System (ECCS) Pump Suction Piping Void Migration because of Mathematical and Assumption Errors.

A non-cited violation of 10 CFR Appendix B, Criterion III, "Design Control," for failure to identify calculation errors regarding air void acceptance criteria for emergency core cooling piping. The calculation errors resulted in an incorrect conclusion that air voids in charging and safety injection pump suction piping high points would not likely be entrained in system flow. This issue was more than minor because the incorrect conclusion could reasonably be viewed as a precursor to a more significant event affecting the mitigating systems cornerstone. Specifically, the void limits were based on engineering judgement rather than a technical assessment of charging and safety injection pump performance with void entrainment in the system flow. However, the issue was determined to have very low safety significance in accordance with Phase I of the SDP. The availability of the pumps was never affected because the procedural acceptance criteria limited the detectable air void volumes to a point that performance would not have been degraded.

Inspection Report# : [2002011\(pdf\)](#)G**Significance:** Sep 28, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Corrective Actions and Extent of Condition Reviews for Two Hot Connections Found in the Emergency Diesel Generator Control Panel

The inspectors identified a Non-Cited Violation of 10 CFR 50, Appendix B, Criterion XVI "Corrective Action," in that corrective actions were not adequate for degraded electrical connections found on rectifier bank #1 for the "B" Emergency Diesel Generator (EDG) in October 2001. The degraded rectifier bank connections were characterized as "serious" by industry standards for thermography and required prompt corrective maintenance. The licensee's corrective actions did not adequately evaluate whether the cause was applicable to rectifier bank #2. In July 2002, during troubleshooting efforts for problems with the "B" EDG, two additional "serious" hot connections were discovered on rectifier bank #2. The finding was considered more than minor because if the finding was left uncorrected, the degraded connections could have degraded further and impacted the reliability of the EDG. The finding was determined to be of very low safety significance (Green) since the hot connections did not result in an actual failure of the EDG. Because the finding is of very low safety significance and the finding was captured in the licensee's corrective action program, this finding is being treated as a Non-Cited Violations, consistent with Section VI.A.1 of the NRC Enforcement Policy.

Inspection Report# : [2002005\(pdf\)](#)G**Significance:** Aug 09, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Test the "A" Emergency Diesel Generator (EDG) within 24-hours of the failure of the "B" EDG as required by Technical Specification 3.8.1.1, action b

A violation of Technical Specification 3.8.1.1 associated with the failure to test the "A" emergency diesel generator (EDG) within 24 hours of the "B" EDG being declared inoperable. The issue was entered in the corrective action system as CR 02-11795. This violation is being treated as a non-cited violation consistent with Section VI.A.1 of the NRC Enforcement Policy. The finding is more than minor since failure of the emergency diesel generator could affect the mitigating system cornerstone. The risk of this finding is determined to be of very low safety significance because the mitigating function of the EDG system was not lost since "A" EDG remained operable during the period of time that the "B" EDG was unavailable.

Inspection Report# : [2002010\(pdf\)](#)

G**Significance:** May 25, 2002

Identified By: NRC

Item Type: FIN Finding

Inadequate Implementation of Work Controls Resulted in an Unexpected Loss of Two Annunciator Panels

The operators unexpectedly lost two of six hard wired annunciators in the control room due to breakdowns in the work control process including ineffective communications and insufficient review of the work document. The annunciator panels were quickly returned to service. The inability to recognize the impact of work on plant equipment and specifically the annunciator system could lead to a more significant event. The annunciator system provides operators important information to identify and respond to plant transients and equipment problems. Since the annunciators were lost for a short period of time and operability of mitigating equipment trains was not affected, the risk associated with this issue was determined to be of very low safety significance. The inspectors did not identify any violations of NRC requirements.

Inspection Report# : [2002003\(pdf\)](#)G**Significance:** May 25, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Follow Work Control Procedures for Work Order Changes Associated With an Emergency Diesel Generator

The licensee performed an unauthorized change to a work order associated with an addition of a diode to the motor-operated potentiometer (MOP), which is part of the electrical governor control system for the "B" emergency diesel generator (EDG). This change did not receive the required reviews. The result was a surge on the input devices to the MOP and a subsequent aborted maintenance run of the EDG. Engineers, mechanics, and management reviews did not identify an additional problem caused by surge in the system prior to the maintenance run. The failure to follow procedures for the control of maintenance activities was a Non-Cited Violation of Technical Specification 6.7.1.a. Inadequate control of maintenance activities on risk significant safety-related equipment could lead to a more significant event and could affect the reliability and availability of mitigating equipment. Using the shutdown operations significance determination process, the inspectors determined the finding was of very low significance.

Inspection Report# : [2002003\(pdf\)](#)G**Significance:** Apr 17, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Corrective Actions Resulted in Air Intrusion in the "A" Emergency Diesel Generator Lubrication Oil System

On April 17, 2002, following maintenance activities, the licensee experienced an air intrusion event into the "A" emergency diesel generator (EDG) lubrication oil system. The inspectors identified that the licensee had inadequate corrective actions to prevent reoccurrence of air intrusion in the EDG lubrication oil system. A prior air intrusion event caused the December 2000 failure of the "B" EDG. This finding affected the mitigating systems cornerstone because it increased the probability for disrupting oil flow to the "A" EDG main bearings which could have resulted in failure of the EDG, impacting the reliability of the "A" EDG. The finding was determined to be of very low safety significance (GREEN), since the air intrusion into the lubricating oil system did not result in damage to the "A" EDG. The failure to implement effective corrective actions was a Non-Cited Violation of 10 CFR 50, Appendix "B", Criterion XVI, "Corrective Action."

Inspection Report# : [2002004\(pdf\)](#)

Barrier Integrity

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Physical Protection



Significance: Sep 28, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Maintain Safeguards in Accordance with 10 CFR 73.55(b.1.i.) and the Licensee's Security Plan (Security Officer Inattentive to Duty)

An in-office review by Region I security specialists identified a non-cited violation of 10 CFR 73.55(b.1.i) and the requirements of Seabrook Physical Security Plan. On July 25, 2002, a member of the Security Response Force failed to respond to an intrusion alarm and was subsequently found inattentive while on duty. Failure of the response force member to respond to the intrusion alarm in a manner to assure conformance with the requirements of the Seabrook Station Physical Security Plan and Procedures was determined to have very low safety significance using the Interim Physical Significance Determination Process. The finding involved a vulnerability of Safeguards Systems or Plans, but no actual intrusion occurred and there have not been more than two similar findings in the past four quarters.

Inspection Report# : [2002005\(pdf\)](#)

Miscellaneous

Last modified : March 25, 2003